This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-53 (canceled)

Claim 54 (Currently Amended): A method of vectorizing a set of document predicate structures, comprising the steps of:

identifying each set of at least one predicates and arguments in said set of document predicate structures by a predicate keys that are is an integer representations, and estimating wherein conceptual nearness of two of said document predicate structures in said set of document predicate structures is estimated by subtracting corresponding one of said predicate keys.

Claim 55 (Currently Amended): A method of vectorizing a set of document predicate structures, as recited in claim 54, comprising the further step of constructing multi-dimensional vectors using said integer representations.

Claim 56 (original): A method of vectorizing a set of document predicate structures, as recited in claim 55, comprising the further step of normalizing said multi-dimensional vectors.

Claim 57 (Currently Amended): A method of vectorizing a set of query document predicate structures, as recited in claim 54, further comprising the further step of identifying at least one query predicate structures by a second predicate keys that are is a second integer representations, and constructing second multi-dimensional vectors, for each of said at least one query predicate structures, using said second integer representations.

Claim 58 (Currently Amended): A method of vectorizing a set of query document predicate structures, as recited in claim 56, further comprising the further step of identifying at least one

query predicate structures by a second predicate keys that are is a second integer representations, and constructing second multi-dimensional vectors, for each of said at least one query predicate structures, using said second integer representations.


Claims 59-69 (canceled)